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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,568	12/05/2001	Robert C. Knauerhase	884.624US1	7088
21186	7590	09/09/2004	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			D AGOSTA, STEPHEN M	
			ART UNIT	PAPER NUMBER
			2683	
DATE MAILED: 09/09/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/004,568	KNAUERHASE ET AL.
	Examiner	Art Unit
	Stephen M. D'Agosta	2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 March 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \*    c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 12-1-03 is in compliance and accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

The drawings were received on 3-12-02 and have been reviewed by the draftsperson and examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3, 5, 7-23, 25-27** rejected under 35 U.S.C. 102(b) as being anticipated by Silver's Unified Network Presence Management White Paper (hereafter Silver).

*- Examiner's note: The publish date for Silver's white paper is 2000 and no "month" was provided. The examiner believes the paper is more likely to have been published in the first 11 months of 2000 than the last month, hence the 102b.*

As per **claim 1**, Silver teaches a method comprising:

Determining at least one presence rule, wherein the presence rule comprises a condition and a state (page 2, 3<sup>rd</sup> paragraph teaches use of an agent that predicts best method of contacting the user at a particular moment in time, at a given location, based on the user's availability, device capability and personal preferences which reads on condition, also see PMD/PSM defined on page 3, STATE discussed on page 4, 3<sup>rd</sup> paragraph):

Determining whether the condition is met (page 4, 4<sup>th</sup> paragraph teaches receiving notifications when presence data changes which reads on determining condition met/not met); and

When the condition is met, updating presence information for a mobile device with the state (again, page 4, 4<sup>th</sup> paragraph teaches receiving notifications if/when presence data changes which reads on the condition being met and updating presence data). Also see page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered").

As per **claim 2**, Silver teaches claim 1 wherein the condition is based on time (page 2, 3<sup>rd</sup> paragraph teaches a "particular moment in time" which reads on the claim).

As per **claim 3**, Silver teaches claim 1 wherein the condition is based on a location of the mobile device (page 2, 3<sup>rd</sup> paragraph teaches a "given location" which reads on the claim).

As per **claim 5**, Silver teaches claim 3 wherein the location is determined using a cell-based radio network (page 2, 5<sup>th</sup> paragraph teaches "cellular location" which reads on using the cellular network to determine mobile's location as is well known in the art (see Forssen and Smyth, not cited).

As per **claim 7**, Silver teaches a server (page 4 shows architecture for Unified Network Presence Manager which the examiner interprets as being hosted on a computer/server and the PMD/PSM/UNMM defined on page 3 as running/hosted on said server) comprising:

Presence information (page 3, see PMD - discloses that the PMD represents a common repository in which subscriber presence data is deposited/retrieved), and

A controller to determine a presence rule for a mobile device (page 3, PSM defined as containing preference logic and rule-based processes which reads on a controller), wherein the presence rule comprises a condition and a corresponding state, and to update the presence information with the corresponding state when the condition is met (page 2, 3<sup>rd</sup> paragraph teaches use of an agent that predicts best method of contacting the user at a particular moment in time, at a given location, based on the user's availability, device capability and personal preferences which reads on condition, also see PMD/PSM defined on page 3, STATE discussed on page 4, 3<sup>rd</sup> paragraph. See page 4, 4<sup>th</sup> paragraph teaches receiving notifications when presence data changes which reads on determining condition met/not met. Also see page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered").

As per **claim 8**, Silver teaches claim 7 wherein the condition is based on a calendar (page 2, 4<sup>th</sup> paragraph teaches use of PDA which can host a calendar and 5<sup>th</sup> paragraph specifically teaches a calendar).

As per **claim 9**, Silver teaches claim 7 wherein the controller is to determine the location of the mobile device (page 2, 3<sup>rd</sup> paragraph teaches “in a given location” which requires the system to locate the user).

As per **claim 10**, Silver teaches claim 9 wherein the condition is based on location (page 2, 3<sup>rd</sup> paragraph teaches a “given location” which reads on the claim since the system can determine a condition by locating the user, eg. user is/is not at a specific location).

As per **claim 11**, Silver teaches claim 7 wherein the server further uses the presence information in an instant messaging system (page 2, 1<sup>st</sup> paragraph teaches interfacing to and communicating with an instant messaging system).

As per **claim 12**, Silver teaches a mobile device (page 2, 1<sup>st</sup> paragraph teaches mobile devices) comprising:

A controller to determine a location of the mobile device (page 2, 3<sup>rd</sup> paragraph teaches “a given location” which requires determination of user’s position, 5<sup>th</sup> paragraph teaches “cellular location”), to update presence information based on the location and to send the presence information to a server (page 5 last paragraph teaches determination of a “network presence” which combines with the “given location” to be interpreted as a location and drives updating of presence data at the UNMM server – see page 5, second to last paragraph which teaches an example of a person registering at a hotel which causes an indicator to be generated based on said registering and reads on updating the presence data. The PMD/PSM/UNMM described on page 3 would be updated as the user roams).

As per **claim 13**, Silver teaches claim 12 wherein the controller further is to update the presence information based on a condition and a corresponding state, wherein the condition comprises the location (page 2, 3<sup>rd</sup> paragraph teaches “a given location” while the 5<sup>th</sup> paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity’s state which reads on the claim. See page 4, 3<sup>rd</sup> paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition has changed from “logged off network” to “logged on to network”).

As per **claim 14**, Silver teaches claim 13 wherein the controller is further to update the presence information with the corresponding state when the condition is met page 2, 3<sup>rd</sup> paragraph teaches “a given location” while the 5<sup>th</sup> paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity’s state which reads on the claim. See page 4, 3<sup>rd</sup> paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition has changed from “logged off network” to “logged on to network”. This data will be sent to the PMD repository each time a user’s state changes).

As per **claim 15**, Silver teaches claim 12 wherein the presence information comprises reachability information (page 2, 3<sup>rd</sup> paragraph teaches “a given location” while the 5<sup>th</sup> paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity’s state which reads on the claim. See page 4, 3<sup>rd</sup> paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition has changed from “logged off network” to “logged on to network”. Hence, turning one’s phone on will register the user onto the network, change their presence information thus changing their reachability status).

As per **claim 16**, Silver teaches claim 15 wherein the reachability information comprises an identification of an instant messaging system to which the mobile device is connected (page 2, 1<sup>st</sup> paragraph teaches interfacing to and communicating with instant messaging systems which inherently requires identification of the system to which the mobile is connected. The examiner notes that most IM systems are Internet based which uses TCP/IP and requires IP Addressing to/from users/systems).

As per **claim 17**, Silver teaches claim 15 wherein the reachability information comprises identification of a cellular network to which the mobile device is connected (page 2, 1<sup>st</sup> paragraph teaches interfacing to and communicating with mobile telephony systems and requires the user to identify/authenticate to said mobile system. Page 5, 5<sup>th</sup> paragraph teaches GSM system registration).

As per **claim 18**, Silver teaches a signal-bearing medium comprising instructions (PMD/PSM/UNMM are hosted on a computer), wherein the instructions when read and executed by a processor (said computer executes instructions/software) comprise:

Determining a presence rule for a mobile device, wherein the presence rule comprises a condition and a corresponding state (page 2, 3<sup>rd</sup> paragraph teaches use of an agent that predicts best method of contacting the user at a particular moment in time, at a given location, based on the user's availability, device capability and personal preferences which reads on condition, also see PMD/PSM defined on page 3, STATE discussed on page 4, 3<sup>rd</sup> paragraph)::

Determining when the condition is met (page 4, 4<sup>th</sup> paragraph teaches receiving notifications when presence data changes which reads on determining condition met/not met), and

Sending the corresponding state to a presence server when the condition is met state (again, page 4, 4<sup>th</sup> paragraph teaches receiving notifications if/when presence data changes which reads on the condition being met and updating presence data). Also see page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered").

As per **claim 19**, Silver teaches claim 18 wherein determining the presence rule further comprises querying a user of the mobile phone for the presence rule (page 2, 5<sup>th</sup> paragraph teaches harvesting presence data from the user while page 3, PSM is the logic that will query the mobile user/device as their presence data/rule(s) changes).

As per **claim 20**, Silver teaches claim 18, wherein determining the presence rule further comprises loading the presence rule from a server (page 3, PMD/PSM/UNMM are hosted on a server and the PSM contains logic/rules processes to determine presence data and reads on the claim).

As per **claim 21**, Silver teaches claim 20 wherein the corresponding state is selected from a group consisting of available, not available, busy and do not disturb (page 2, 1<sup>st</sup> paragraph teaches instant messaging and uses these terms. Page 1, 5<sup>th</sup> paragraph teaches knowing if a user is logged on/off and/or active which reads on available/not available. Also, the 5<sup>th</sup> paragraph teaches use of the person's calendar which would indicate if the user is busy at an appointment and if they can be disturbed or not).

As per **claim 22**, Silver teaches an apparatus (examiner interprets the UNMM system shown on page 3 as being an apparatus/server), comprising:

A presence server (page 3 - PMD, PSM and UNMM hosted on server) comprising:

Presence information (page 3, PMD is a repository for subscriber presence information),

A location database comprising locations of a plurality of mobile devices (figure 2, 5<sup>th</sup> paragraph teaches determining cellular location of mobile),

A controller to find the locations of the plurality of mobile devices (page 2, 5<sup>th</sup> paragraph teaches cellular location of mobile), to determine a plurality of presence rules for the plurality of mobile devices (page 3 – PSM stores logic and rules-based processes that distill the flow of indicators into a “network presence”), wherein each of the presence rules comprises respective conditions and respective corresponding states and to update the presence information with the respective corresponding states when the respective conditions are met (page 3 – PSM takes into account the timing indicators and their ability to accurately reflect an entity's state which the examiner interprets as requiring knowledge of condition/state. Also see page 4, 4<sup>th</sup> paragraph

teaches receiving notifications if/when presence data changes and/or page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered").

As per **claim 23**, Silver teaches claim 22 wherein the controller is further to obtain the locations from the mobile devices (page 1, 5<sup>th</sup> paragraph teaches cellular location of the mobile which reads on obtaining the locations of the mobile devices. The examiner notes that many ways are possible, eg. using the BTS's to triangulate, GPS, etc., and either the system or mobile can determine the location).'

As per **claim 25**, Silver teaches claim 22 wherein the location database further comprises a mapping of coordinates to locations of the plurality of mobile devices (page 2, 5<sup>th</sup> paragraph teaches determining cell location of the mobile and page 3 teaches the PMD which is a database/repository of subscriber presence information. One skilled would ensure that the location information is included in the PMD database for all mobiles tracked).

As per **claim 26**, Silver teaches claim 22 wherein the presence information comprises reachability information (page 2, 3<sup>rd</sup> paragraph teaches "a given location" while the 5<sup>th</sup> paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity's state which reads on the claim. See page 4, 3<sup>rd</sup> paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition has changed from "logged off network" to "logged on to network". Hence, turning one's phone on will register the user onto the network, change their presence information thus changing their reachability status).

As per **claim 27**, Silver teaches claim 22 further comprising the plurality of mobile devices (page 3, PMD is a repository for all of the presence information for each mobile being tracked).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 4** rejected under 35 U.S.C. 103(a) as being unpatentable over Silver as applied to claim 3 above, and further in view of Forssen et al. US 6,031,490 (hereafter Forssen).

As per **claim 4**, Silver teaches claim 3 **but is silent on** wherein the location is determined using GPS.

The examiner notes that GPS location determination is well known in the art and can be used by a person in a handheld device, integrated into a cell phone, etc.. Hence one skilled would use GPS to determine a person's location.

Forssen teaches use of GPS to determine a person's location (title, figure 2 #120, figure 5 and C5, L64-67 and C13, L40-45).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using GPS, to provide an alternate means for determining the location of the mobile device.

**Claims 6 and 24** rejected under 35 U.S.C. 103(a) as being unpatentable over Silver as applied to claim 3/22 above, and further in view of Forssen and Smyth et al. US 6,347,224 (hereafter Smyth).

As per **claim 6**, Silver teaches claim 3 **but is silent on** wherein the location is determined using a hotspot with which the mobile device communicates.

The examiner notes that hotspots are well known in the art and can be used to determine a person's location (as they roam into said hotspot's coverage area). Hence one skilled would use a hotspot to determine a person's location.

**Forssen** teaches use of cell-based systems to determine a person's location (abstract teaches use of TDOA, TOA and DOA , figure 5, 509, C1, L20-35) while **Smyth** teaches that cellular networks provide macro and micro cells - the former provide country wide coverage but a low bandwidth, the latter service local 'hotspots' with higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using a hotspot with which the mobile device communicates, to provide means for the user to roam into hotspot areas and still have its location determined via said hotspot.

As per **claim 24**, Silver teaches claim 22 **but is silent on** wherein the controller is further to obtain the locations from hotspot-access points to which the mobile devices are connected.

The examiner notes that hotspots are well known in the art and can be used to determine a person's location (as they roam into said hotspot's coverage area). Hence one skilled would use a hotspot to determine a person's location.

**Forssen** teaches use of cell-based systems to determine a person's location (abstract teaches use of TDOA, TOA and DOA , figure 5, 509, C1, L20-35) while **Smyth** teaches that cellular networks provide macro and micro cells - the former provide

country wide coverage but a low bandwidth, the latter service local 'hotspots' with higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the controller is further to obtain the locations from hotspot-access points to which the mobile devices are connected, to provide means for the user to roam into hotspot areas and still have its location determined.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

1. Dalal et al. US 2002/0065894
2. McDowell et al. US 2002/0035605
3. Aggarwal et al. US 5,943,478

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta

